



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

JUL 21 2003

REPLY TO THE ATTENTION OF:

B-19J

Norman Stoner, P.E.
Division Administrator
Federal Highway Administration
3250 Executive Drive
Springfield, Illinois 62703

Re: Comments on the DEIS for U.S. Route 20, Between Illinois Route 84 (Northwest of Galena) and Bolton Road (Northwest of Freeport), Illinois - EIS No. 030253

Dear Mr. Stoner:

In accordance with the U.S. Environmental Protection Agency's (U.S. EPA's) responsibilities under both the National Environmental Policy Act and Section 309 of the Clean Air Act, we have reviewed the Draft Environmental Impact Statement (DEIS) for U.S. Route 20, between Illinois Route 84 (northwest of Galena), and Bolton Road (northwest of Freeport), Illinois. The purpose of the proposed project is to provide a transportation facility that properly addresses existing and projected system deficiencies, and seeks to improve the safety and efficiency of the transportation system. The stated needs for the project relate to:

1. regional economic characteristics,
2. system capacity,
3. safety concerns,
4. community access, and
5. system continuity.

The DEIS evaluates three different management alternative types:

1. No Action. Current management plans would continue in the project area under the no-action alternative.
2. Freeway Alternatives. There are 10 different freeway alternatives, which vary by alignment. Each freeway alternative is a divided highway with full access control.
3. Expressway Alternatives. There are two expressway alternatives which vary by alignment. Each expressway alternative is a principle arterial highway with partial access control.

The preferred alternative is the Longhollow Freeway with South Simmons Mound Alternate. After reviewing the DEIS, we have the following comments and recommendations:

Karst Areas and Groundwater Contamination

We are concerned about potential groundwater impacts from the project within karst areas. According to the DEIS, the project area contains karstic features such as caves and sinkholes. Roadway construction projects in karst areas is notable because groundwater is very susceptible to stormwater contamination. The DEIS does not quantify the acreage of karst areas affected by each build alternative; therefore it is not possible to compare the alternatives on this issue. The final environmental impact statement (FEIS) should indicate the acreage of karst topography associated with each build alternative.

The DEIS states, "If karst features are encountered during the design of the selected alternate, special design considerations will be applied to prevent groundwater contamination." However, the DEIS does not describe these special design considerations. Current technical capacity for mitigating adverse impacts to groundwater resources in karst terrain is very limited. The FEIS should include a detailed description of the special design considerations planned for karst areas, for our review.

In addition to direct groundwater impacts within karst areas, the project may cause secondary groundwater impacts. Induced development associated with the project may include on-site wastewater treatment systems. Poorly designed or operated on-site wastewater treatment systems could cause groundwater impacts within karst areas. The FEIS does not include information about state, county, or local regulations (e.g., zoning or land use plans) which would protect karst areas from wastewater contamination. The project proponents should conduct an assessment of this information, consider it prior to selecting an alternative, and include the assessment in the FEIS.

Impaired Water Impacts

We are concerned with the potential of this project to indirectly impact impaired sections of waterbodies in the study area. The Galena River is a waterbody in the study area listed as an impaired stream under Section 303(d) of the Clean Water Act. The DEIS states that potential sources of its impairment are agriculture, urban runoff/storm sewers, channelization and unknown sources. Under Section 303(d), impaired streams are subject to the Total Maximum Daily Load (TMDL) program, which is used to return the streams to compliance with water quality standards. It is not clear how indirect impacts from the proposed project (e.g., increased stormwater flow rates) would affect the TMDL program goals for the Galena River. The FEIS should provide this information, and describe mitigation commitments to reduce these impacts.

Neotropical Migrant Impacts

We are concerned about impacts to neotropical migrants in the project area. The DEIS states that thirteen species of neotropical migrant birds were identified in the forested parts of the project area. Neotropical migrant populations are declining due to predation, nest parasitism, breeding

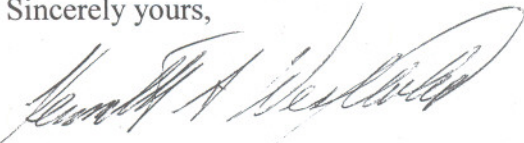
habitat loss, mortality from avian disease (e.g. West Nile Virus), and habitat destruction along migration routes. According to the DEIS, upland forest impacts among the build alternatives range from 241.9 to 306.2 acres. The DEIS addresses fragmentation impacts to neotropical migrants, and efforts to reduce these impacts. However, it does not address direct impacts to neotropical migrants from forest removal. If the upland forest is removed during a neotropical migrant's nesting season, then any eggs or fledglings left in the nests would be killed. This would be a violation of the Migratory Bird Treaty Act. Direct ecological impacts to neotropical migrants throughout the forest should be explored in greater depth in the FEIS. Also, the project proponents should provide the nesting season dates for the neotropical migrants in the project area, and commit to avoid disturbing these birds' habitat during this time.

Forest Impact Mitigation

Finally, we are concerned about mitigation for the preferred alternative's impacts on forest land in the project area. The preferred alternative will impact 273.5 acres of upland forest. Part of the impact area (47 acres) is high quality hardwood forest which buffers the Tapley Woods Conservation Area (a state natural area). The removal of woodland under the build alternatives is an irreversible commitment of resources, because it would take decades to reestablish the lost forest. An adequate reforestation plan is warranted for mitigation, given the long term period for effectiveness. According to the DEIS, the project proponents would mitigate forest impacts by purchasing 209.85 acres for reforestation. This compensation acreage is less than the 273.5 acres impacted by the preferred alternative. In addition, the purchase of land with established trees does not compensate for trees removed under the project. Instead, an acre of trees should be planted for each acre of trees removed. Therefore, the mitigation section of the FEIS should commit the project proponents to plant trees in an area which equals the area of trees removed under the selected alternative.

In summary, U.S. EPA has identified issues relating to: (1) karst areas and groundwater contamination, (2) impaired water impacts, (3) neotropical migrant impacts, and (4) forest impact mitigation. Based upon our review of this project and its DEIS, we have assigned a rating of "EC-2" (environmental concerns, insufficient information). Please refer to the enclosed Summary of Rating Definitions Sheet. This rating will be published in the Federal Register. If you have any questions or comments, please feel free to contact Newton Ellens, of my staff, at (312) 353-5562.

Sincerely yours,



Kenneth A. Westlake
Chief, Environmental Planning and Evaluation Branch
Office of Strategic Environmental Analysis

Enclosure

cc: Gregory Mounts
District Engineer
Illinois Department of Transportation

Steve Hamer
Transportation Review Program
Division of Natural Resources Review
Illinois Department of Natural Resources

SUMMARY OF RATING DEFINITIONS AND FOLLOWUP ACTIONS*

ENVIRONMENTAL IMPACT OF THE ACTION

LO—Lack of Objections

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC—Environmental Concerns

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

EO—Environmental Objections

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU—Environmentally Unsatisfactory

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

ADEQUACY OF THE IMPACT STATEMENT

Category 1—Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2—Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3—Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

**From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment.*